

Amendments to the Claims

Please cancel Claims 2, 6-8, 10, and 13-21 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1, 3- 5, 9, 11, 12, and 22-24, and add new Claims 25 and 26 to read as follows.

1. (Currently Amended) An image processing apparatus for processing a photographed image of an object, said apparatus comprising:

an object extracting portion ~~for extracting~~ configured to extract an object region which is a region of the object from the photographed image; and

an analyzing portion ~~for determining~~ configured to determine a region from which a ~~feature value of the photographed image~~ statistics value is ~~extracted~~ calculated on a basis of both a pixel which is ~~value~~ on a contour on a side in the object region ~~obtained by said object extracting portion.~~ and shows a maximum value and a pixel which is on a contour on the other side in the object region and shows a maximum value; and

a gradation conversion portion configured to execute a gradation conversion processing on the photographed image based on the statistics value.

2. (Cancelled)

3. (Currently Amended) An image processing apparatus according to claim 1 ~~or 2~~, wherein said object extracting portion extracts ~~as the object region a region of the object of which a partial region is deleted in accordance with a predetermined basis~~ based on a through region and a region adjoining the through region in a predetermined width.

4. (Currently Amended) An image processing apparatus according to claim 1 ~~or 2~~, wherein the photographed image is an image obtained by radiographing of the object.

5. (Currently Amended) An image processing apparatus according to claim 1 ~~or 2~~, wherein said analyzing portion determines the region ~~from which the feature value is extracted~~ on a basis of a pixel value ~~designating a pixel value having a predetermined characteristic on the contour in the object region~~ on a line segment connecting a pixel showing a maximum value on a contour on a side of the object region and a pixel showing a maximum value on a contour on the other side of the object region.

6-8. (Cancelled)

9. (Currently Amended) An image processing apparatus according to claim 1, wherein said analyzing portion determines the region from which the ~~feature~~ statistics value is extracted on a basis of a pixel value on a contour in the object region which has been smoothed.

10. (Cancelled)

11. (Currently Amended) An image processing system in which a plurality of apparatuses are connected with each other in a state capable of communicating with each other, wherein the system has each function of the image processing apparatus according to ~~either~~ claim 1 ~~or 2~~.

12. (Currently Amended) An image processing method for processing a photographed image of an object, said method comprising the steps of:

extracting an object region which is a region of the object from the photographed image; and

determining a region from which a ~~feature value of the photographed image~~ statistics value is ~~extracted~~ calculated on a basis of both a pixel ~~value~~ which is on a contour on a side in the object region ~~obtained at the step of extracting the object region and shows~~ a maximum value and a pixel which is on a contour on the other side in the object region and shows a maximum value; and

executing a gradation conversion processing on the photographed image
based on the statistics value.

13-21. (Cancelled)

22. (Currently Amended) A computer-readable storage medium, said medium storing a program ~~for making~~ configured to make a computer realize functions of the image processing apparatus according to claim 1 ~~or 2~~.

23. (Currently Amended) A computer-readable storage medium, said medium storing a program ~~for making~~ configured to make a computer realize functions of the image processing system according to claim 11.

24. (Currently Amended) A computer-readable storage medium, said medium storing a program ~~for making~~ configured to make a computer execute steps of the image processing method according to claim 12 ~~or 13~~.

25. (New) An image processing apparatus according to claim 1, wherein the statistics value is an average value.

26. (New) An image processing apparatus according to claim 1, wherein the object region includes a cervical spine region.